



Nassau Hub

Major Investment Study

Public Meeting #4

April 5, 2005

Thomas R. Suozzi, Nassau County Executive

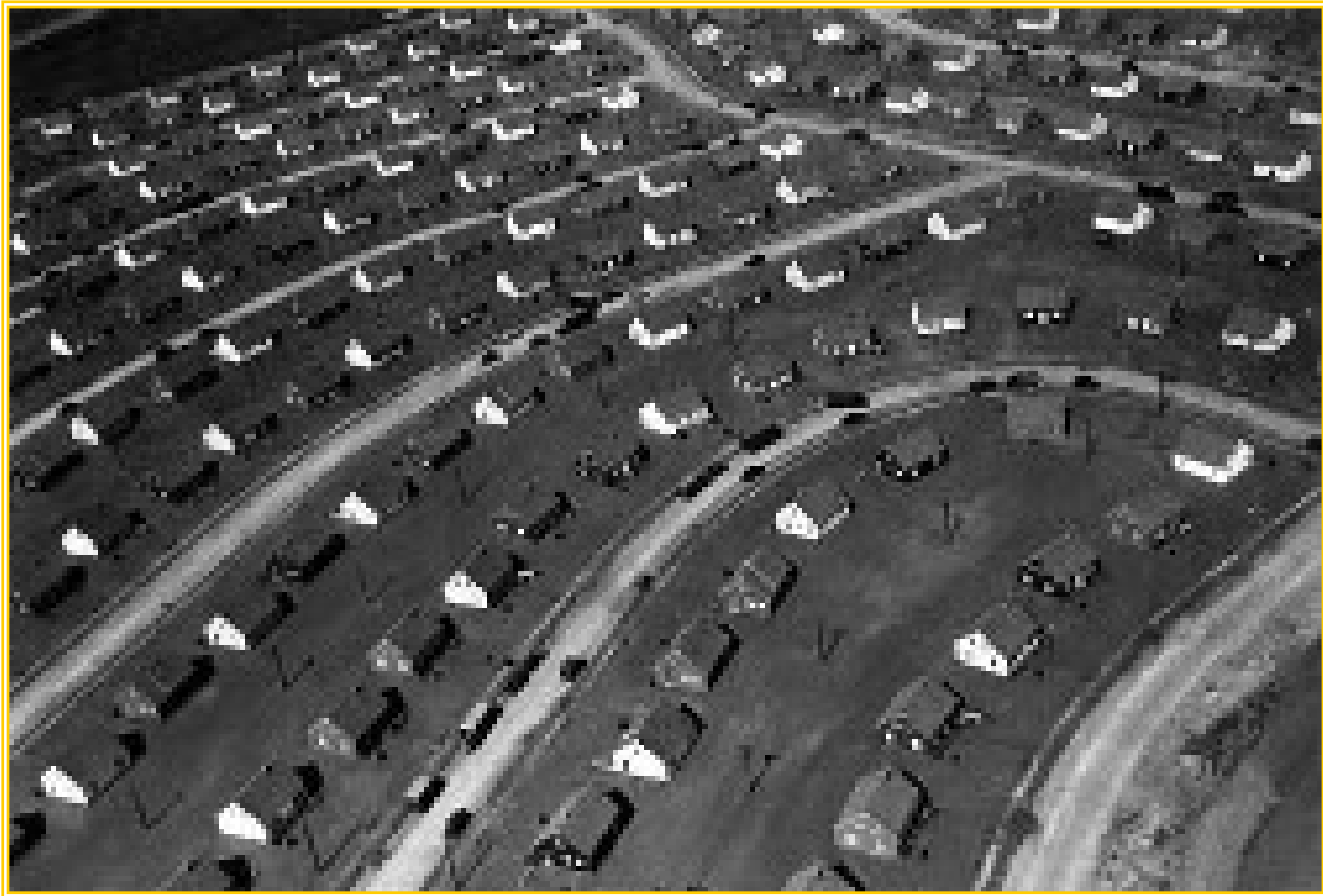


Agenda

- Welcome and Introductions
- Study Context
- Progress Report
- Discussion of Short List of Alternatives
- Review of Evaluation Methodology
- Evaluation Results
- Land Use Scenarios
- Suggested Recommendations
- Next Steps
- Questions and Answers

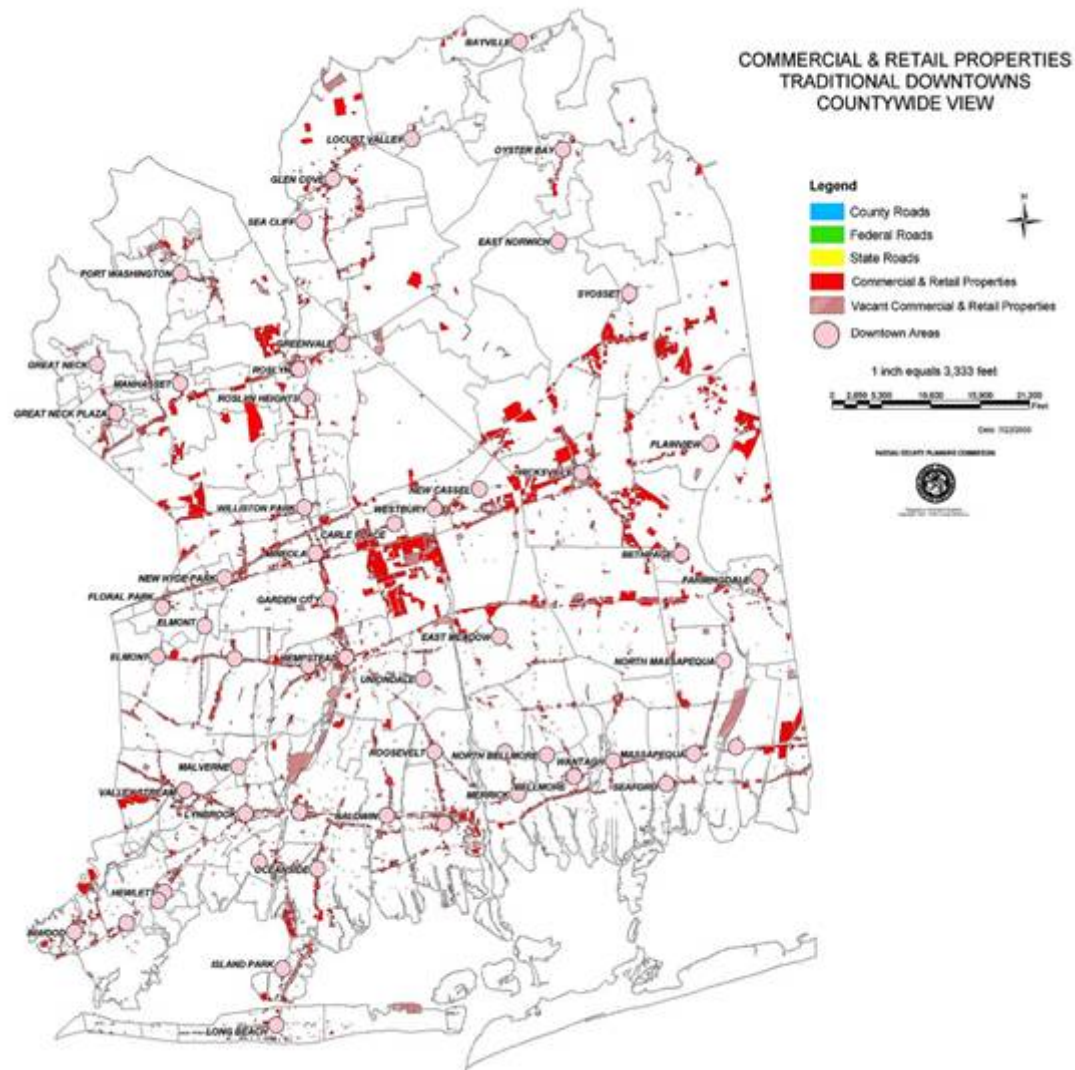


Nassau County: America's First Suburban County





Nassau County: Commercial and Retail Development



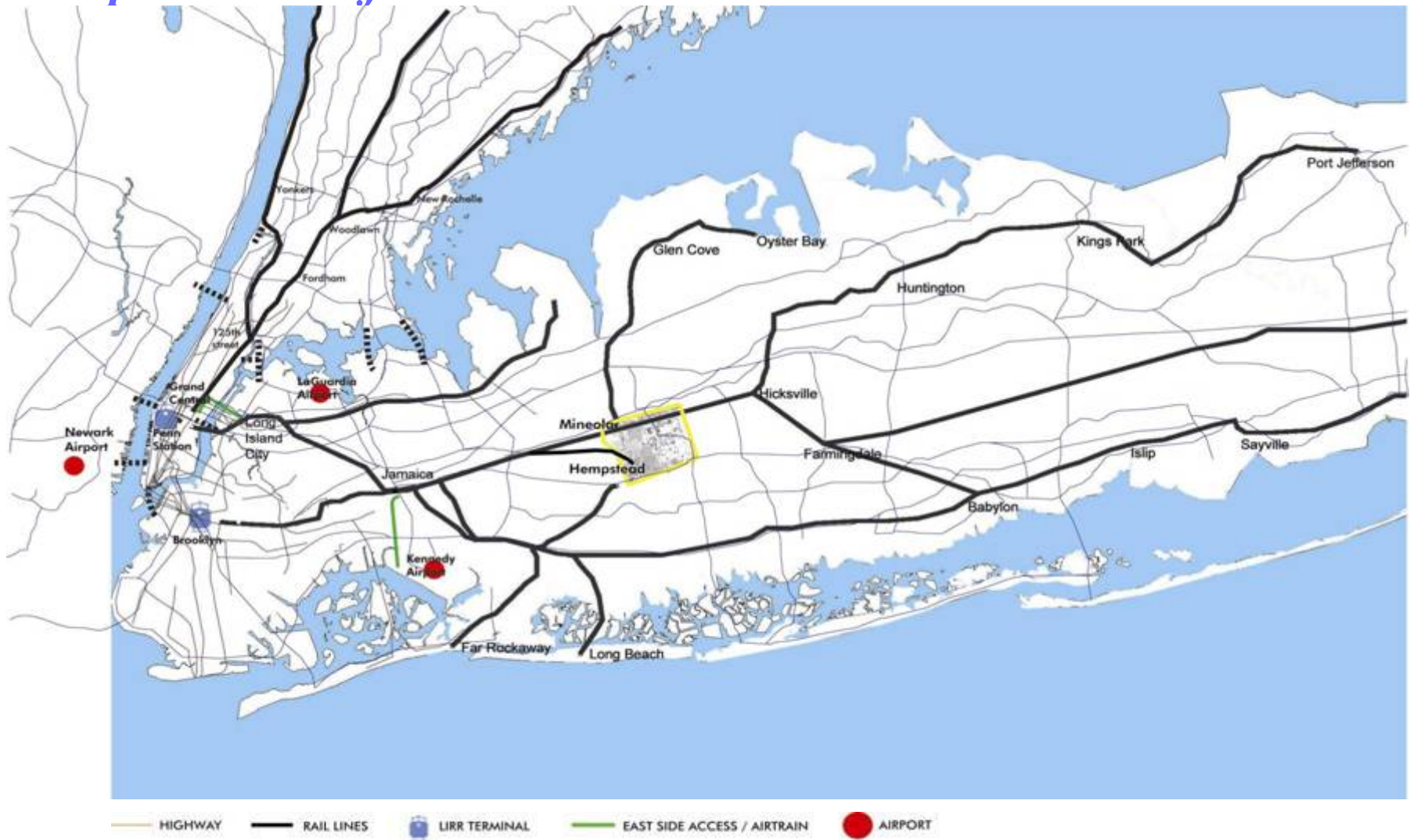


Nassau Hub Study Area - Today



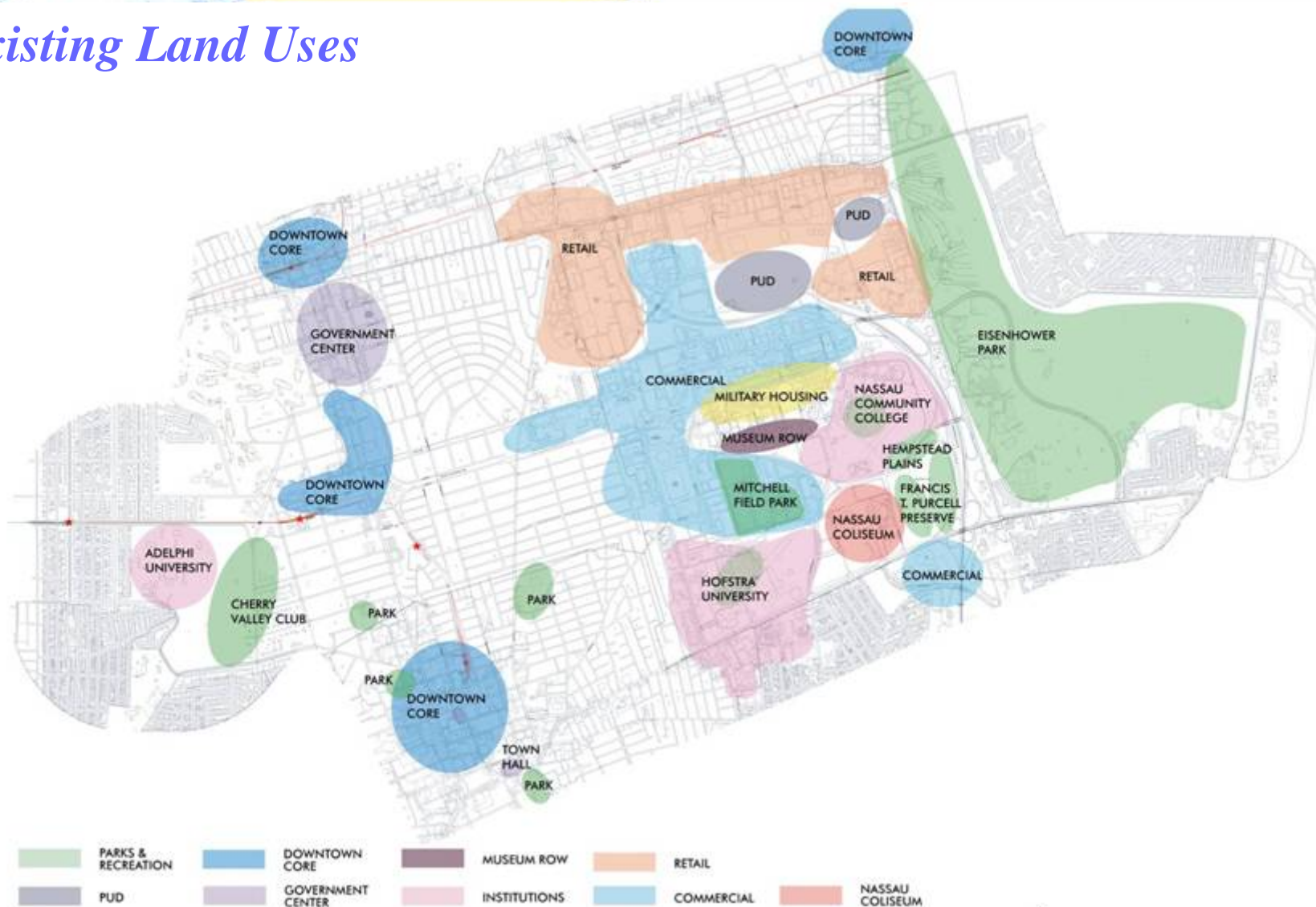


Importance of the Nassau Hub





Existing Land Uses





Vision for the Nassau Hub Study Area





Why the Nassau Hub Study was Needed

- Traffic congestion/gridlock will only get worse if we do nothing
- Inability to support economic growth
- Missing transportation links:
 - Between LIRR stations & activity centers
 - Between study area activity centers
- Lack of north-south transit connectivity
- Disjointed land use patterns
- Auto-oriented land use development



Study Purpose

- First step in Federal process for funding major transportation investments
- Develop a vision for the Nassau Hub
- Engage public in defining land use & transportation needs & solutions
- Provide public & stakeholders with information needed to make decisions
- Create a “place at the table” for Nassau County to continue receiving Federal funding



Nassau Hub MIS Meetings Held to Date

- **Steering Committee Meeting #1 – May 28, 2003**
- **Stakeholder Committee Meeting #1 – June 4, 2003**
- **Public Meeting #1 - June 10, 2003**

- **Land Use Planning Design Workshop and Charrette – July 15, 2003**

- **Steering Committee Meeting #2– September 23, 2003**
- **Stakeholder Committee Meeting #2 – September 24, 2003**
- **Public Meeting #2 - October 21, 2003**

- **Steering Committee Meeting #3 – March 11, 2004**
- **Stakeholder Committee Meeting #3 – March 15, 2004**
- **Public Meeting #3 - March 30, 2004**

- **Steering/Stakeholder Committee Meeting #4 – June 22, 2004**

- **Steering/Stakeholder Committee Meeting #5 – January 25, 2005**

- **Steering/Stakeholder Committee Meeting #6 – March 24, 2005**



Technical Components of an MIS

- Study purpose & need
- Define land use & development options
- Identify alternative transportation solutions
- Travel demand forecasting
- Operations planning
- Estimate Capital and Operating Costs
- Financial analysis
- Evaluation (proposed recommendations)



Baseline Alternative

- **Defined as the “best that can be done” to improve transit service within the study corridor without a major capital investment in new infrastructure**
- **Baseline Alternative must be defined so that comparisons can be made with a more capital-intensive Locally Preferred Alternative (LPA)**
- **The Baseline Alternative assumes expanded LI Bus routes, more hours of service, and increased frequency to the network, following Long Island Bus Study recommendations**

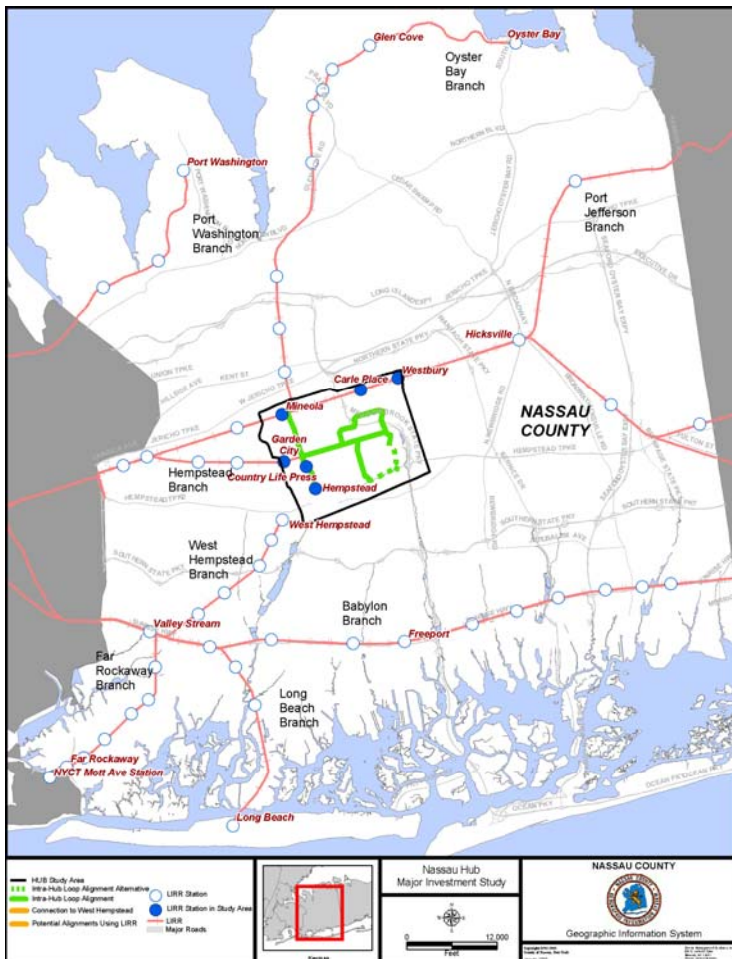


Alternatives Considered

Core System

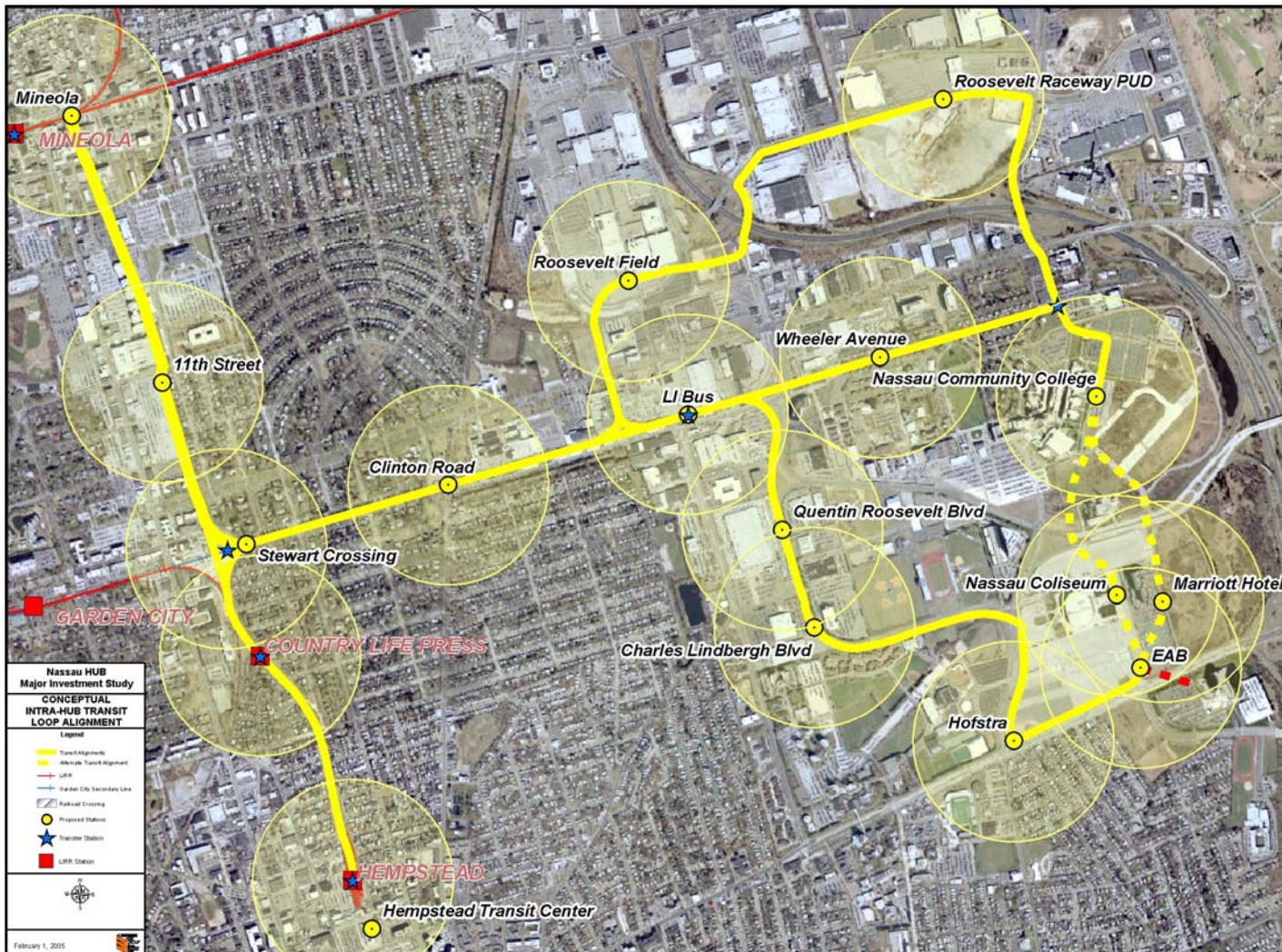
Alignment: Core System

- Creates new Intra-Hub Loop serving Hub destinations
- Provides new links to Hub between LIRR and LI Bus at Mineola and Hempstead stations





Alternatives Considered – Core System



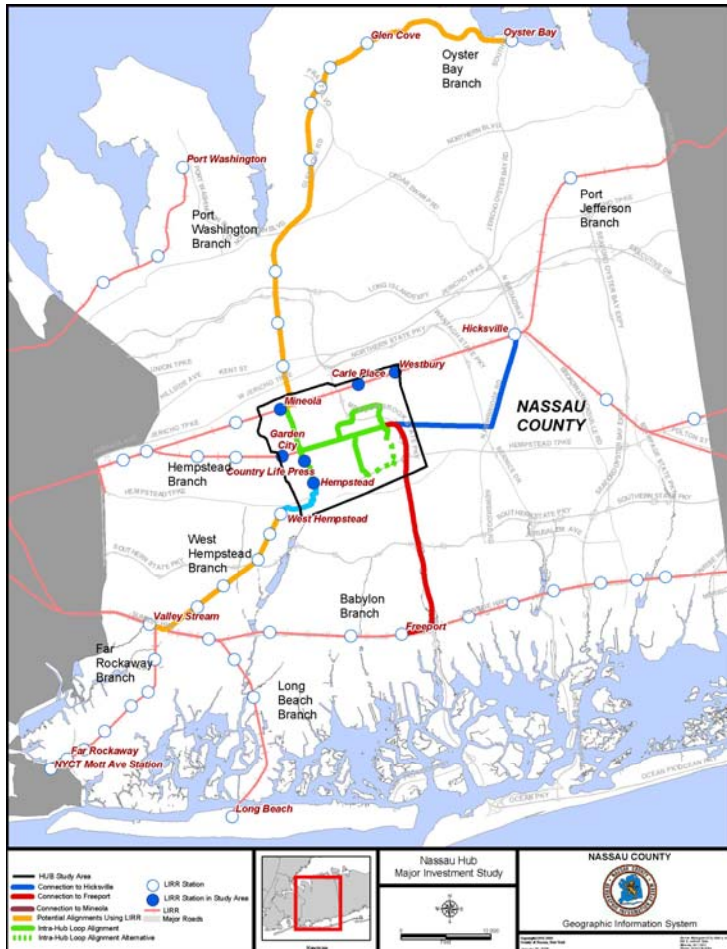


Alternatives Considered

Full System

Alignment: Full System

- Creates new comprehensive county-wide transit system
- Provides new links to Hub from Oyster Bay, Mineola, Hicksville, Hempstead, Freeport and Valley Stream
- Provides enhancements to local bus service for improved station access from points not directly served





Bus Rapid Transit (BRT)





Light Rail Transit (LRT)





Automated Guideway Transit (AGT)





Evaluation Methodology

- Used to identify the recommended alternative(s) for the study
- Measures are both quantitative measures (e.g., ridership, capital costs, etc.) and qualitative measures (e.g., potential to support transit-oriented land use)
- The screening criteria include:
 - ✓ Ridership Demand
 - ✓ Transit Supportive Land Use
 - ✓ Order-of-Magnitude Capital Costs
 - ✓ Order-of-Magnitude Operations and Maintenance (O&M) Costs
 - ✓ Environmental and Other Benefits



Purpose for Ridership Modeling

- **Long Island Transportation Plan to Manage Congestion (LITP) model used as a tool to objectively test Nassau Hub alternatives**
 - **Used to provide regional consistency in modeling**
 - **LITP model had to be refined for the Nassau Hub MIS**
 - **Model validated by its performance based on current conditions**
 - **Model projects 2020 ridership for the 6 AM to 10 AM weekday peak period**
 - **Model results used to evaluate alternatives based on performance measures (e.g., transit ridership, transit mode share, etc.)**



AM Peak Period (6 - 10AM) Automobile Trips into Nassau Hub

Timeframe	Number of Automobiles	
NYMTC LITP Base Year	51,400	-
NYMTC 2020 LITP Projection	66,200	28% Change from NYMTC LITP Base
Nassau Hub – 2020 Development Scenario	80,000	55% Change from NYMTC LITP Base



Projected Year 2020 AM Peak Period (6 - 10AM) Weekday Ridership (Boardings)

[Note: Includes transfers between BRT or LRT/AGT routes at stations]

Alignment		
Alternative	Core System	Full System
BRT 2020 / Hub Development	4,400 / 6-7,000	23,000 / 25-26,000
LRT/AGT 2020 / Hub Development	6,600 / 8-9,000	30,600 / 33-34,000



Order-of-Magnitude Capital Costs by Alternative for NYMTC LITP Projection (2005 Dollars)

Alternative	Core System	Full System
BRT	\$560 Million	\$1.9 Billion
LRT	\$560 Million	\$2.1 Billion
AGT	\$1.3 Billion	\$5.1 Billion

Note: Does not include costs for real estate acquisition



Operations and Maintenance Cost Estimates

- **Operations and Maintenance (O&M) Cost Estimates are developed to determine the annual cost of operating and maintaining the proposed transit service**
- **Typical O&M costs include:**
 - **Vehicles (maintenance and cleaning costs)**
 - **Propulsion (fuel or electricity costs, depending on the vehicle)**
 - **Infrastructure (costs for maintaining guideway, stations, signals, etc)**
 - **Operations (labor costs for employees such as vehicle operators and maintenance crew, administration costs, and materials)**



*Order-of-Magnitude Annual Operations and Maintenance Costs
by Alternative for NYMTC LITP 2020 Projection (2005 Dollars)*

Alternative	Core System	Full System
BRT	\$8.6 Million	\$54.8 Million
LRT	\$8.0 Million	\$44.2 Million
AGT	\$19.4 Million	\$99.7 Million



Other Benefits

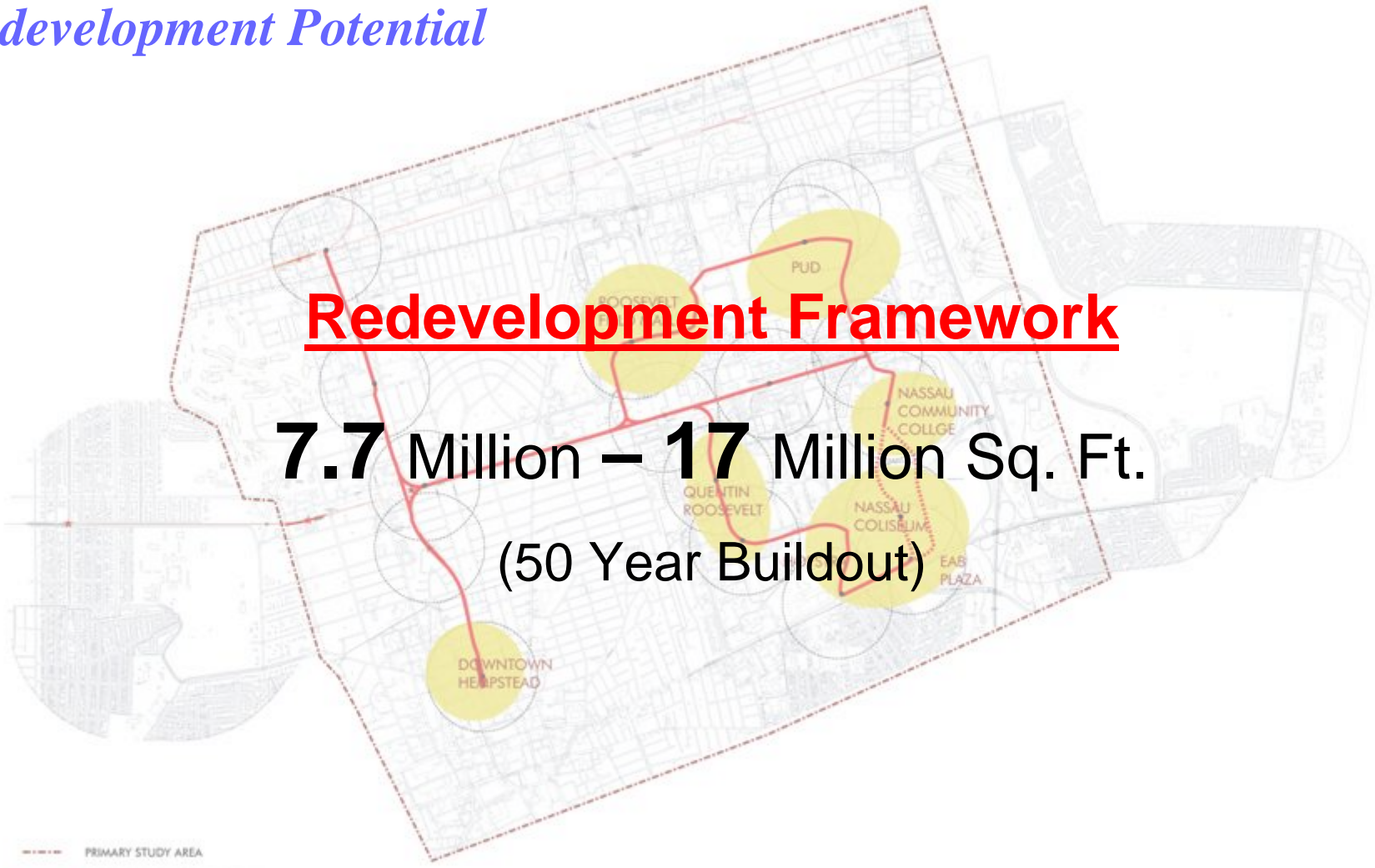
- **Improved air quality**
- **Transportation**
 - For the first time, an alternative to driving the Hub is provided via new expanded, faster, and more frequent transit services
 - Creates new links between LIRR stations and major activity centers in study area
 - Establishes new links between various study area activity centers
 - Full Network addresses the lack of north-south transit connectivity
 - Provides a foundation to serve both intra-County travel patterns as well as reverse peak commuters from New York City



Redevelopment Potential

Redevelopment Framework

7.7 Million – 17 Million Sq. Ft.
(50 Year Buildout)

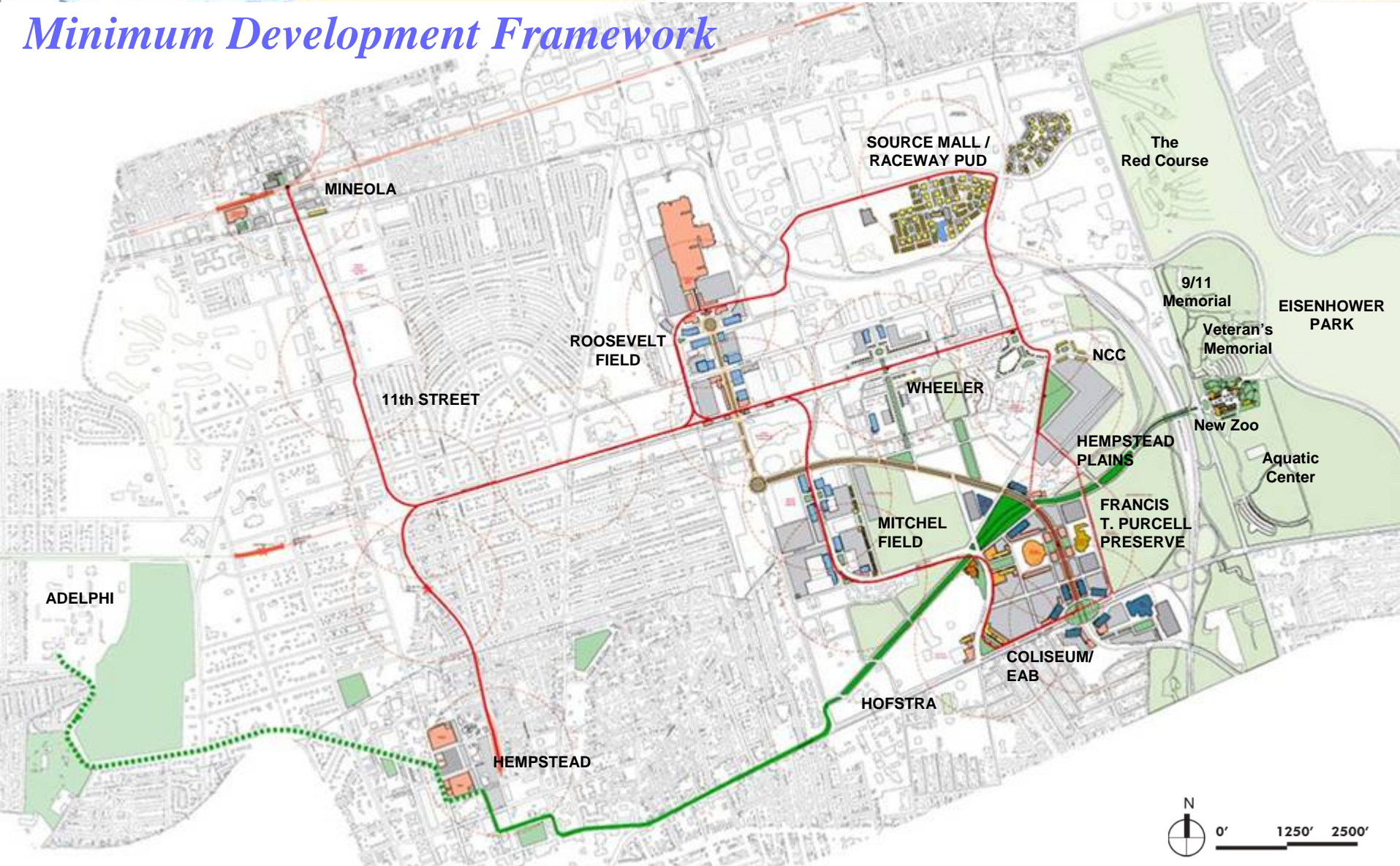


--- PRIMARY STUDY AREA
— PROPOSED TRANSIT ALIGNMENT
○ 1/4 MILE RADIUS



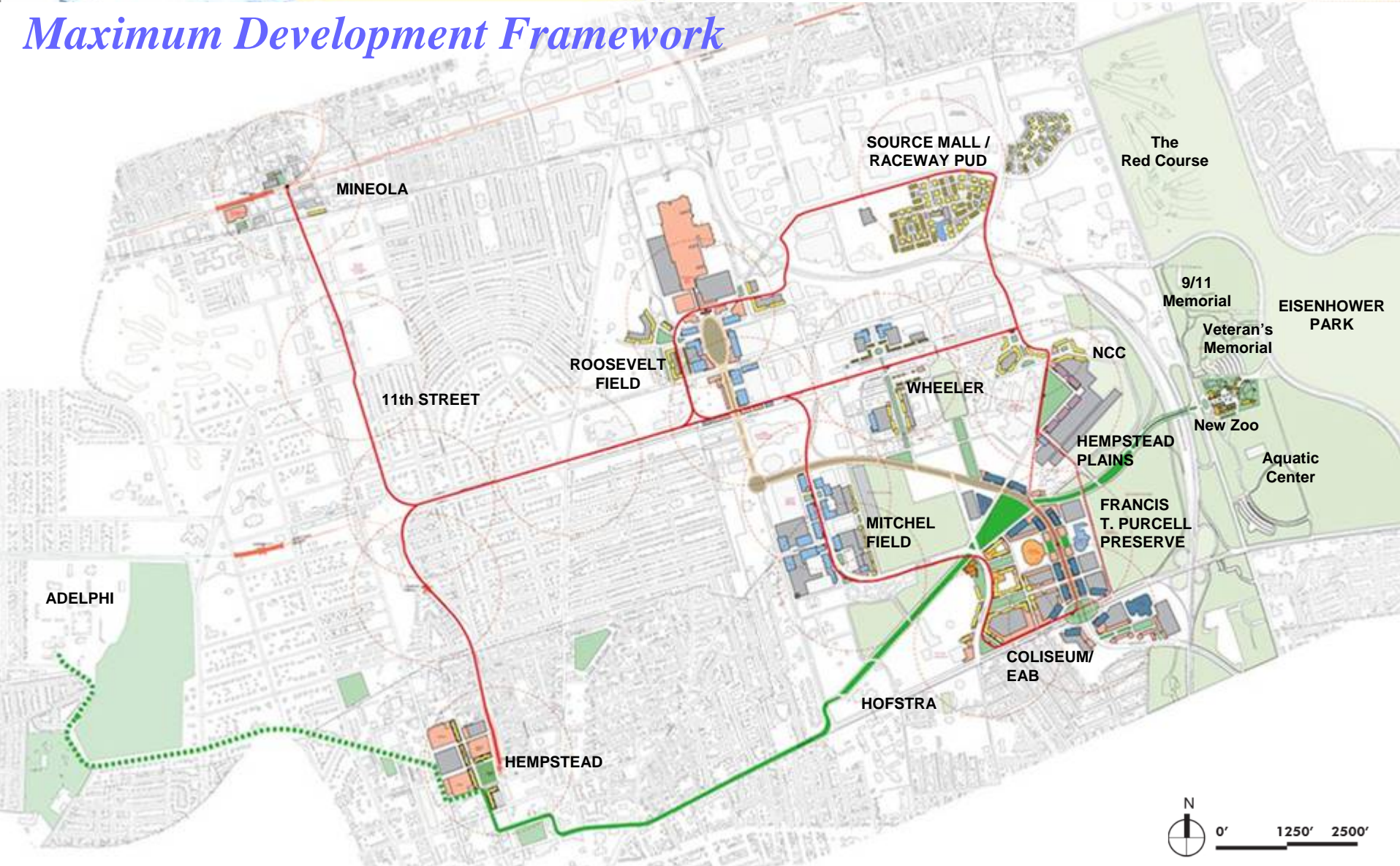


Minimum Development Framework





Maximum Development Framework





“Emerald Ribbon:” Pedestrian and Bicycle Greenway to connect Cultural/ Educational/ Recreational Nodes



Greenway



Downtown node



Bicycle / Pedestrian Path





“Golden Thread:” Connects Commercial/Retail Nodes

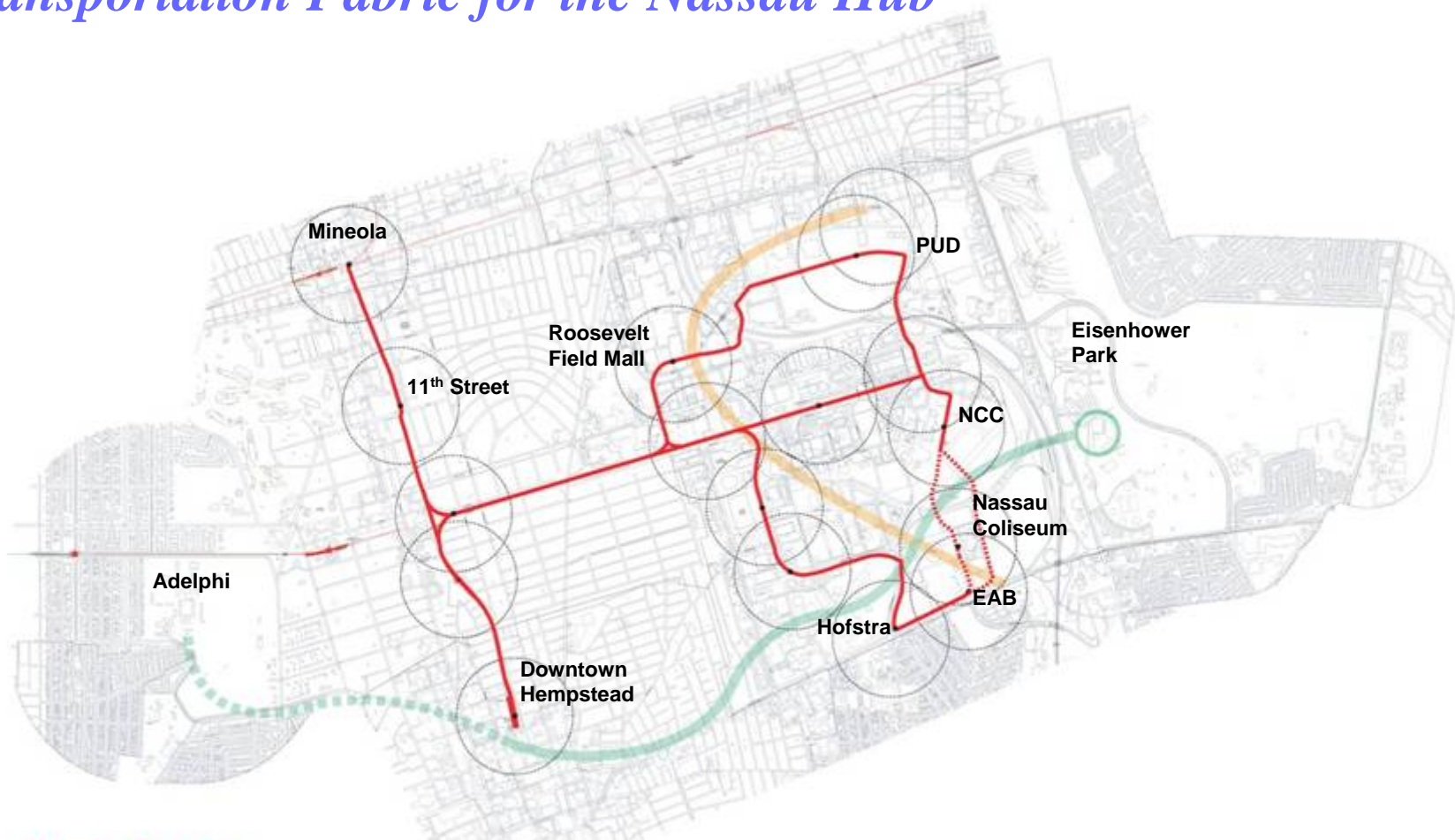


Bethesda, MD





Transportation Fabric for the Nassau Hub



"Emerald Ribbon" connecting the Cultural/ Educational/ Recreational nodes
"Golden Thread" connecting the Commercial/ Retail nodes

— PROPOSED TRANSIT ALIGNMENT
○ 1/4 MILE RADIUS



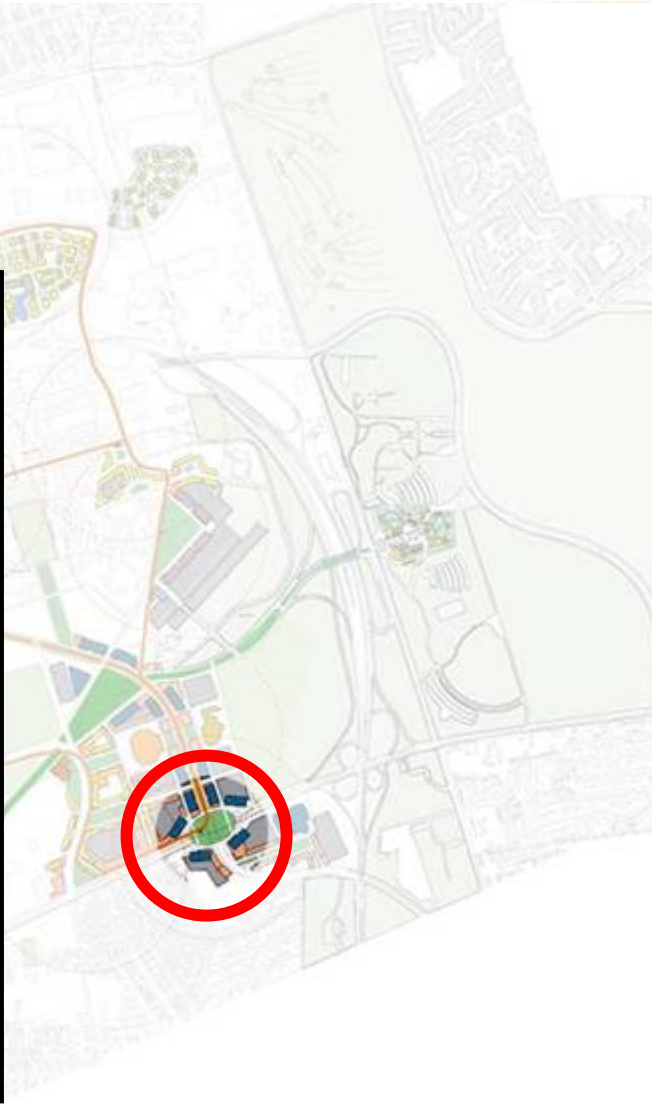
Vision for the Nassau Hub Study Area





Hempstead Turnpike Oval

New Central Business District (CBD)





Coliseum Area

New Central Business District (CBD)





Roosevelt Field Mall
New Southern Gateway to Roosevelt Field



Transit Alternatives- BRT



Transit Alternatives- LRT



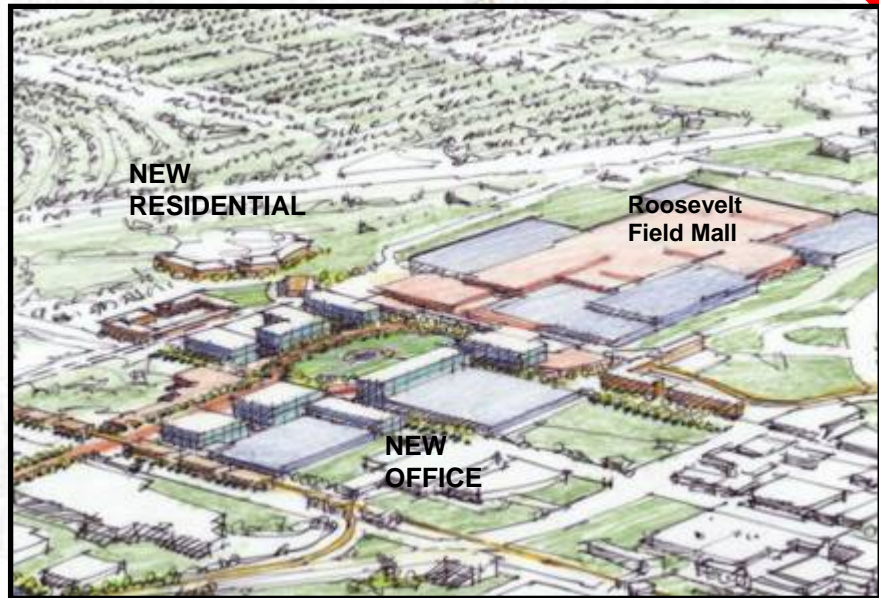
Transit Alternatives- AGT



NEW
RESIDENTIAL

Roosevelt
Field Mall

NEW
OFFICE





Screening of Garden City Secondary





Transit Supportive Land Use Benefits

- **Transit-Oriented Development (TOD) creates a focal point and identity for the Nassau Hub that does not exist today**
- **TOD encourages the use of transit as a means of travel to the Hub**
- **TOD in conjunction with transportation improvements allow for increased density allowing for land to be re-developed for higher and better uses**
- **Provides the opportunity to create a variety of housing types, while also providing neighborhood retail and services**
- **Allows County's tax base to grow more rapidly, while maximizing the use of existing infrastructure**
- **Overall economic activity in the area is enhanced due to the synergies created by integrating more dense development into existing neighborhoods**



Next Steps

- Complete analysis of potential funding sources
- Post *White Paper* to Nassau County's website by April 8, 2005
- Incorporate comments received from committees and public by April 29, 2005
- Complete and distribute Final Report on, or before May 31, 2005
- Begin DEIS Phase Fall 2005 – Decision on which mode to advance (BRT, LRT, AGT) to be made during public scoping phase